

Application No. 10/668,656

Filed: September 23, 2003

TC Art Unit: 1751

Confirmation No.: 2071

AMENDMENT TO THE CLAIMS

1. (Original) A hair-dyeing method comprising the steps of: first mordanting hair with a dye mordant selected from the group consisting of a metal element of aluminum, iron, zinc, nickel, calcium, or magnesium, a metal salt thereof, and a mixture thereof; then secondly uniformly applying a hair dye comprising a formulation primarily composed of a dye component including an indican derived from an indigo plant and a formulation primarily composed of a β -glucosidase enzyme component, the hair dye being applied to hair either directly or after mixed with a proper amount of water; and, upon completion of hair-dyeing, finishing the hair by rinsing with water and drying.

2. (Original) A hair-dyeing method comprising the steps of: uniformly applying a hair dye comprising a formulation primarily composed of a dye component including an indican derived from an indigo plant and a formulation primarily composed of a β -glucosidase enzyme component, the hair dye being applied either directly or after mixed with a proper amount of water; upon completion of hair-dyeing, mordanting hair with a dye mordant selected from the group consisting of a metal element of aluminum, iron, zinc, nickel, calcium, or magnesium, a metal salt thereof,

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and a mixture thereof; and finishing the hair by rinsing with water and drying.

3. (Currently Amended) A hair-dyeing method comprising the steps of:

first mordanting hair with a dye mordant selected from the group consisting of a metal element of aluminum, iron, zinc, nickel, calcium, or magnesium, a metal salt thereof, and a mixture thereof; then secondly uniformly applying a hair dye comprising a formulation primarily composed of a dye component including an indican derived from an indigo plant and selected from the group consisting of a fresh indigo leaf which has been heat-treated to inactivate the natural β -glucosidase contained therein; an extract solution which contains indican extracted from fresh indigo leaves and has been heat-treated to inactivate the natural β -glucosidase contained therein; an indican-containing powder obtained by freeze-drying an indican extract solution; an indican-containing formulation in which the fresh indigo leaves have been heat-treated to inactivate the natural β -glucosidase contained therein; an indican-containing extract solution; an indican-containing powder carried by a carrier selected from the group consisting of starch, cellulose, and silk powder, and mixtures thereof; and a

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formulation primarily composed of a β -glucosidase enzyme component selected from the group consisting of extract of a fresh indigo leaf, Enokitake (Flammulina velutipes), Shitake (Lentinus Edodes), a young corn leaf, an apricot kernel, an almond, and mixtures thereof; and further comprising: another dye material selected from the group consisting of a natural plant dyestuff of gamene, curcuma, sappanwood, cochineal, logwood, henna, Castanea (chestnut tree), Allium cepa (onion) or coffee, an extract thereof, a powder obtained by freeze-drying the extract, and mixtures thereof; the hair dye being applied to hair either directly or after mixed with a proper amount of water; and, upon completion of hair-dyeing, finishing the hair by rinsing with water and drying.

4. (Currently Amended) A hair-dyeing method comprising the steps of:

first mordanting hair with a dye mordant selected from the group consisting of a metal element of aluminum, iron, zinc, nickel, calcium, or magnesium, a metal salt thereof, and a mixture thereof; then secondly uniformly applying a hair dye comprising a formulation primarily composed of a dye component including an indican derived from an indigo plant and selected from the group consisting of a fresh indigo leaf which has been heat-treated to

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inactivate the natural β -glucosidase contained therein; an extract solution which contains indican extracted from fresh indigo leaves and has been heat-treated to inactivate the natural β -glucosidase contained therein; an indican-containing powder obtained by freeze-drying an indican extract solution; an indican-containing formulation in which the fresh indigo leaves have been heat-treated to inactivate the natural β -glucosidase contained therein; an indican-containing extract solution; an indican-containing powder carried by a carrier selected from the group consisting of starch, cellulose, and silk powder, and mixtures thereof; and a formulation primarily composed of a β -glucosidase enzyme component selected from the group consisting of a juice of a fresh indigo leaf, a β -glucosidase-containing powder obtained by freeze-dried fresh indigo leaves or juice thereof, and a mixture thereof; and further comprising: another dye material selected from the group consisting of a natural plant dyestuff of gamene, curcuma, sappanwood, cochineal, logwood, henna, Castanea (chestnut tree), Allium cepa (onion) or coffee, an extract thereof, a powder obtained by freeze-drying the extract, and a mixture thereof; the hair dye being applied to hair either directly or after mixed with a proper amount of water; and, upon completion of hair-dyeing, finishing the hair by rinsing with water and drying.

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5. (Currently Amended) A hair-dyeing method comprising the steps of:

uniformly applying a hair dye comprising a formulation primarily composed of a dye component including an indican derived from an indigo plant and selected from the group consisting of a fresh indigo leaf which has been heat-treated to inactivate the natural β -glucosidase contained therein; an extract solution which contains indican extracted from fresh indigo leaves and has been heat-treated to inactivate the natural β -glucosidase contained therein; an indican-containing powder obtained by freeze-drying an indican extract solution; an indican-containing formulation in which the fresh indigo leaves have been heat-treated to inactivate the natural β -glucosidase contained therein; an indican-containing extract solution; an indican-containing powder carried by a carrier selected from the group consisting of starch, cellulose, and silk powder, and mixtures thereof; and a formulation primarily composed of a β -glucosidase enzyme component selected from the group consisting of extract of a fresh indigo leaf, Enokitake (*Flammulina velutipes*), Shitake (*Lentinus Edodes*), a young corn leaf, an apricot kernel, an almond, and mixtures thereof; and further comprising: another dye material selected from the group

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consisting of a natural plant dyestuff of gamene, curcuma, sappanwood, cochineal, logwood, henna, Castanea (chestnut tree), Allium cepa (onion) or coffee, an extract thereof, a powder obtained by freeze-drying the extract, and mixtures thereof; the hair dye being applied either directly or after mixed with a proper amount of water; upon completion of hair-dyeing, mordanting hair with a dye mordant selected from the group consisting of a metal element of aluminum, iron, zinc, nickel, calcium, or magnesium, a metal salt thereof, and a mixture thereof; and finishing the hair by rinsing with water and drying.

6. (Currently Amended) A hair-dyeing method comprising the steps of:

uniformly applying a hair dye comprising a formulation primarily composed of a dye component including an indican derived from an indigo plant and selected from the group consisting of a fresh indigo leaf which has been heat-treated to inactivate the natural β -glucosidase contained therein; an extract solution which contains indican extracted from fresh indigo leaves and has been heat-treated to inactivate the natural β -glucosidase contained therein; an indican-containing powder obtained by freeze-drying an indican extract solution; an indican-containing formulation in

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which the fresh indigo leaves have been heat-treated to inactivate the natural β -glucosidase contained therein; an indican-containing extract solution; an indican-containing powder carried by a carrier selected from the group consisting of starch, cellulose, and silk powder, and mixtures thereof; and a formulation primarily composed of a β -glucosidase enzyme component selected from the group consisting of a juice of a fresh indigo leaf, a β -glucosidase-containing powder obtained by freeze-dried fresh indigo leaves or juice thereof, and a mixture thereof; and further comprising: another dye material selected from the group consisting of a natural plant dyestuff of gamene, curcuma, sappanwood, cochineal, logwood, henna, Castanea (chestnut tree), Allium cepa (onion) or coffee, an extract thereof, a powder obtained by freeze-drying the extract, and a mixture thereof; the hair dye being applied either directly or after mixed with a proper amount of water; upon completion of hair-dyeing, mordanting hair with a dye mordant selected from the group consisting of a metal element of aluminum, iron, zinc, nickel, calcium, or magnesium, a metal salt thereof, and a mixture thereof; and finishing the hair by rinsing with water and drying.